MATE-T580: Quiz 1

Name:

Question 1

Select the line of code used to create a numerical vector, x, which contains the values 3, 18, -6, 7:

A.

```
x <- (3, 18, -6, 7)
```

B.

```
x <- [3, 18, -6, 7]
```

C.

```
x <- c(3, 18, -6, 7)
```

D.

```
x <- (3; 18; -6; 7)
```

Question 2

The first few rows of the `iris` dataset:

```
##   Sepal.Length Sepal.Width Petal.Length Petal.Width Species
## 1          5.1         3.5          1.4         0.2  setosa
## 2          4.9         3.0          1.4         0.2  setosa
## 3          4.7         3.2          1.3         0.2  setosa
## 4          4.6         3.1          1.5         0.2  setosa
## 5          5.0         3.6          1.4         0.2  setosa
```

Select the line of code used to print the petal length of the observation in the thrid row:

A.

```
iris(3,4)
```

B.

```
iris[3,"Petal.Length"]
```

C.

```
iris[4,3]
```

D.

```
iris("Petal.Length")[3]
```

Question 3

For the same `iris` dataset, select the line of code used to print the average sepal length for the iris species *virginica*:

A.

```
mean(iris$Sepal.Length[iris$Species <- "virginica"])
```

B.

```
mean(iris$Sepal.Length[iris$Species equalto c("virginica")])
```

C.

```
mean(iris$Sepal.Length[iris$Species = "virginica"])
```

D.

```
mean(iris[iris$Species=="virginica", 1])
```

Question 4

The first few rows of the `mtcars` dataset:

```
##                 car  mpg cyl  hp am gear  qsec    wt
## 1         Mazda RX4 21.0   6 110  1    4 16.46 2.620
## 2     Mazda RX4 Wag 21.0   6 110  1    4 17.02 2.875
## 3        Datsun 710 22.8   4  93  1    4 18.61 2.320
## 4    Hornet 4 Drive 21.4   6 110  0    3 19.44 3.215
## 5 Hornet Sportabout 18.7   8 175  0    3 17.02 3.440
```

Select the line of code used to print the names of cars with mpg greater than 20:

A.

```
mtcars[mtcars$mpg>20,]
```

B.

```
mtcars[mtcars$mpg>20]
```

C.

```
mtcars$names[mtcars$mpg>20,]
```

D.

```
mtcars$names[mtcars$mpg>20]
```

Question 5

For the same `mtcars` dataset, write a single line of code to calclulate the average weight of 4 cylinder cars: